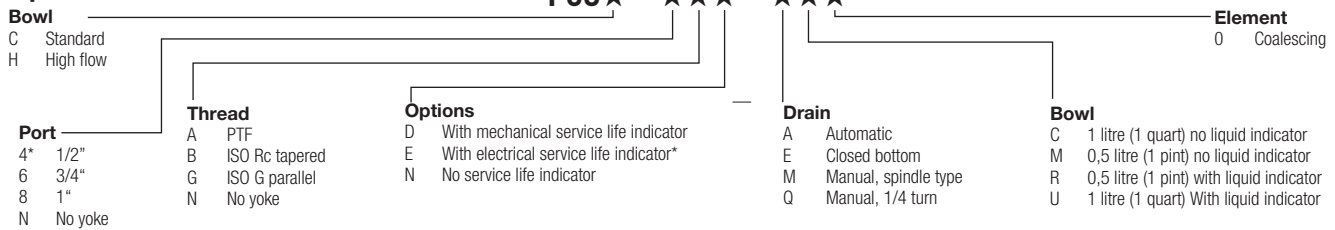


## Option selector



\* Only available with the F68C standard filter. \*\* See Norgren publication IM-900.920 for specifications and electrical wire connections of the optional electric service indicator.

## Technical features

### Technical Data

Fluid: Compressed air  
 Maximum pressure: 17 bar (250 psig)  
 Operating temperature\*:  
 -20° ... +65°C (0° ... +150°F)

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Particulate removal: 0,01 µm

Air quality: Within ISO 8573-1, Class 1 (particulates) and Class 2 (oil content).

Maximum remaining oil content: 0,01 mg/m<sup>3</sup> at +20°C (+70°F) with an inlet concentration of 17 mg/m<sup>3</sup>.

Maximum flow at 6,3 bar (90 psig) inlet pressure to maintain stated oil removal performance:

1/2" ports: 35 dm<sup>3</sup>/s (74 scfm)

3/4" ports: 35 dm<sup>3</sup>/s (74 scfm)

1" ports: 60 dm<sup>3</sup>/s (127 scfm)

1/4 turn manual drain connection: 1/8" pipe thread

Automatic drain connection: 1/8" pipe thread

Automatic drain operating conditions (float operated)

Bowl pressure required to close drain:

Greater than 0,3 bar (5 psig)

Bowl pressure required to open drain:

Less than 0,2 bar (3 psig)

Minimum air flow required to close drain:

1 dm<sup>3</sup>/s (2 scfm)

Manual operation: Depress pin inside drain outlet to drain bowl

Nominal bowl size:

0,5 litre (1 pint U.S.)

1 litre (1 quart U.S.)

Materials:

Body: Aluminium

Yoke: Aluminium

Bowl: Aluminium

Liquid level indicator: Pyrex

Element: Synthetic fibre and polyurethane foam

Elastomers: Synthetic rubber

Service life indicator:

Body: Transparent nylon

Internal parts: Acetal

Spring: Stainless steel

Elastomers NBR

### Replacement Items

Service kit

(items circled on exploded view)

4380-301

0.5 litre bowl liquid level lens (19 thru 27)

4380-060

1 litre bowl liquid level lens (30 thru 38)

4380-061

Filter element, standard, short (53) 5351-08

Filter element, high flow, long (53) 5351-03

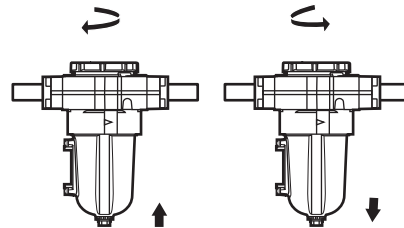
Automatic drain, G1/8 outlet (49) 3000-97

Automatic drain, 1/8 PTF outlet (49) 3000-10

Manual drain, spindle type (44) 684-84  
 Manual drain, 1/4 turn (40) 619-50  
 Mechanical service life indicator (1) 5797-50  
 Electrical service life indicator (6) 4020-51R

### Installation

- Install yoke in air line -
  - with air flow in direction of arrow on top of yoke,
  - upstream of regulators, lubricators, and cycling valves,
  - as close as possible to the air supply when filter is used as a main line filter,
  - as close as possible to the device being serviced when filter is used as a final filter.
- Connect piping to yoke ports using pipe thread sealant on male threads only.
- Lubricate o-rings (15) with a light coat of o-ring grease, then place o-rings in grooves in body (14).
- Place clamp ring under lugs on top of yoke.
- Make sure arrows on yoke and filter point in same direction, then plug filter into yoke and tighten clamp ring hand tight.
- Turn bowl into body until arrowhead on bowl is aligned with or to the right of the arrowhead on the body.
- Flexible tube with 3mm (0.125") minimum I.D. can be connected to the automatic drain. Avoid restrictions in the tube.
- Install a Norgren general purpose filter with a 5 µm element upstream of the oil removal filter to obtain maximum element service life.



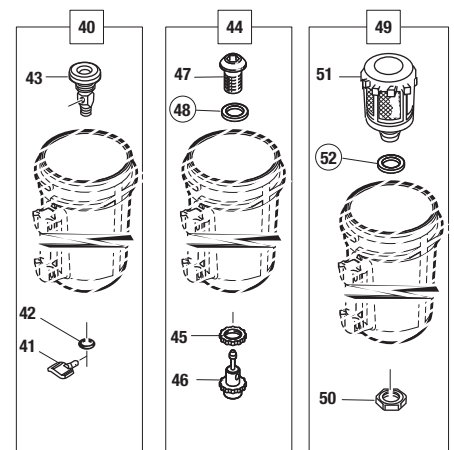
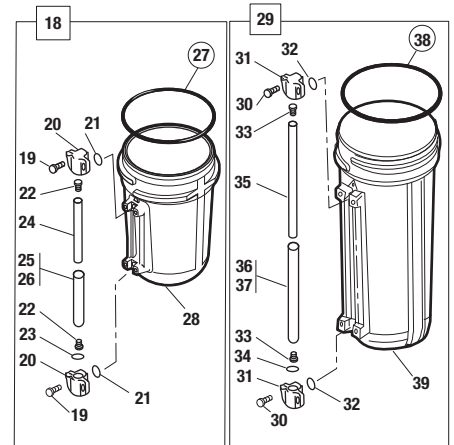
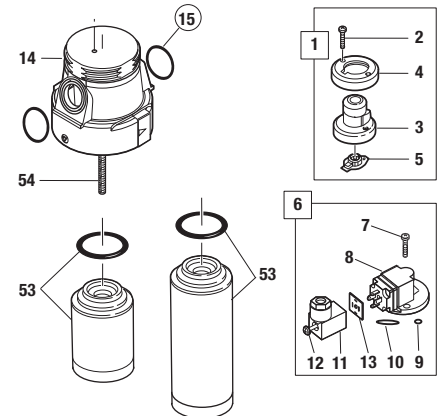
### Servicing

- Open manual drain to expel accumulated liquids. Keep liquids below element (53).
- Replace filter element when pressure drop across element exceeds 0,7 bar (10 psig). The mechanical service life indicator shows approximately all red and the optional electrical service life indicator provides an electrical output when pressure drop across the element reaches 0,7 bar (10 psig)

### Disassembly

- Shut off inlet pressure. Reduce pressure in inlet and outlet lines to zero.
- Unscrew the clamp ring and remove filter from yoke.
- Disassemble in general accordance with the

item numbers on exploded view. Do not remove the drains or the service indicators unless replacement is necessary. Remove and replace only if they malfunction. Do not attempt to remove rod (54), as it is cemented to body.



**Cleaning**

1. Element (53) cannot be cleaned. Clean lens (3, 24, 35) with warm water only. Do not submerge electrical service indicator (6) in water. Clean indicator (6) with dry, clean cloth. Clean other parts with warm water and soap.
2. Rinse and dry parts. Blow out internal passages in body (14) with clean, dry compressed air.
3. Inspect parts. Replace those found to be damaged.

**Assembly**

1. Lubricate o-rings, the portion manual drain body (43) that contacts the bowl, and the hole in the manual drain body that accommodates the stem of drain valve (41) with o-ring grease.
2. Assemble the unit as shown on the exploded view.
3. Assemble the liquid indicator parts (19 thru 26, 30 thru 37) to reservoir. Apply a 0.9 to 1.8 kg (2 to 4 pound) clamping force to upper and lower sight glass brackets (20, 31). Tighten screws (19, 30).
4. Arrows on indicator (3, 8) and body (14) must point in same direction.
5. Torque Table
 

Item	Torque in N-m	(Inch-Pounds)
2, 7 (Screw)	2,8 ... 3,9	(25 ... 34)
19, 30 (Screw)	1,8 ... 2,3	(16 ... 20)
45, 50 (Nut)	8 ... 1,2	(7 ... 10)
53 (Element)	5 ... 6,2	(44 ... 55)
6. Turn bowl into body until arrowhead on bowl is aligned with or to the right of the arrow head on the body.

**Caution**

Water vapor will pass through these units and could condense into liquid form downstream as air temperature drops. Install an air dryer if water condensation could have a detrimental effect on the application.

**WARNING**

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under Technical Data. Before using these products with fluids other than air, for non industrial applications, or for life-support systems consult Norgren.

**Use in potentially explosive atmospheres**

Code of device according EC directive 94/9/EC Ex II 2 GD c TX

- Only non-flammable gase to be used as a medium.
- Surface temperature dependant on process fluid temperature and ambient temperature - must be below the ignition temperature of the flammable gas or dust.
- Earth unit and/or pipework to avoid electrostatic discharge.
- Precautions should be taken to prevent hazard from adiabatic compression.
- Use wet cloth for cleaning.
- Protect the unit from object falling onto it.
- Avoid contact with corrosive environment.
- For servicing the unit it is recommended to carry out this work outside of the danger zone.
- For details of ignition hazard assessment contact Norgren.

